

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0091073

Owner: Melody Lake Ranch Associates, Inc.
Address: 333 Playmor Drive, Leslie, MO 63056

Continuing Authority: Same as above
Address: Same as above

Facility Name: Melody Lake Ranch Associates, Inc.
Facility Address: 333 Playmor Drive, Leslie, MO 63056

Legal Description: NE $\frac{1}{4}$, NW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 27, T42N, R3W, Franklin County

Receiving Stream: Unnamed Tributary to Bourbeuse River (U)
First Classified Stream and ID: Bourbeuse River (P) (02034)
USGS Basin & Sub-watershed No.: (07140103 090008)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - Subdivision - SIC #4952
One cell lagoon/sludge is retained in lagoon
Design population equivalent is 600.
Design flow is 60,000 gallons per day.
Actual flow is 14,775 gallons per day
Design sludge production is 9 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Doyle Childers

September 15, 2006
Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

September 14, 2011
Expiration Date
MO 780-0041 (10-93)

Mike Struckhoff, Director, St. Louis Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 5	
					PERMIT NUMBER MO-0091073	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until March 31, 2009 . Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001 (Note 1)</u>						
Flow	MGD	*		*	Once/ month	24 hour estimate
Biochemical Oxygen Demand ₅	mg/L	*	60	40	Once/ quarter**	grab
Total Suspended Solids	mg/L		70	45	Once/ quarter**	grab
Temperature	°C	*		*	Once/ quarter**	grab
Ammonia Nitrogen	mg/L	*		*	Once/ quarter**	grab
pH – Units	SU	***		***	Once/ quarter**	grab
Total Residual Chlorine (TRC)	mg/L	*		*	Once/ quarter**	grab
Fecal Coliform ****	#/100mL	*		*	Once/ quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>January 28, 2007</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring and reporting requirement only.
- ** Once per quarter in the months of February, May, August, and November.
- *** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units..
- **** Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31. Samples are to be taken during the months of May, August, and October.

Note 1 – A formal water quality review has not been conducted.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 5	
					PERMIT NUMBER MO-0091073	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective April 1, 2009 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below::						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001 (Note 1)</u>						
Flow	MGD	*		*	Once/ month	24 hour estimate
Biochemical Oxygen Demand ₅	mg/L	*	60	40	Once/ quarter**	grab
Total Suspended Solids	mg/L		70	45	Once/ quarter**	grab
Temperature	°C	*		*	Once/ quarter**	grab
Ammonia Nitrogen	mg/L	*		*	Once/ quarter**	grab
pH – Units	SU	***		***	Once/ quarter**	grab
Total Residual Chlorine (TRC) (Note 2)	mg/L	0.019		0.010	Once/ quarter**	grab
Fecal Coliform ****	#/100mL	1000		400	Once/ quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE October 28, 2009 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring and reporting requirement only.
- ** Once per quarter in the months of February, May, August, and November.
- *** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units..
- **** Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31. Samples are to be taken during the months of May, August, and October.

Note 1 – A formal water quality review has not been conducted.

Note 2- This permit contains a Total Residual Chlorine (TRC) limit.

- a. If the TRC limit in this permit is 0.01 mg/L to 0.2mg/L, you must use an analytical method that has a quantification limit of no greater than 0.05 mg/L TRC. For reporting purposes on the Discharge Monitoring Report (DMR), all analytical values below 0.05 mg/L shall be reported as “<quantlim”. All analytical values at or above the quantification limit of 0.05 mg/l shall be reported as the measured value. The Permittee shall report the quantification limit in the “Remarks” section of the DMR. The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average. The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.
- b. If the TRC limit in this permit is 1.0 mg/L; you must use an analytical method with a quantification limit between 0.2 and 0.5 mg/L. All analytical values below the quantification limit shall be reported as “<quantlim”. All analytical values at or above the quantification limit shall be reported as the measured value. The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average. The daily effluent value will be considered equal to 0 mg/l if it is below the quantification limit.
- c. Disinfection is required year-round unless the permit specifically states that “final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31”. If your permit does not require disinfection during the non-recreational months, do not chlorinate during those months.
- d. If chlorine is used as a disinfectant then dechlorination is required and Total Residual Chlorine (TRC) limits are applicable.
- e. If chlorine was not used during a given sampling period, an analysis is not necessary. Report the TRC as “0 mg/L”.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

C. SPECIAL CONDITIONS (continued)

7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) Permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.
8. The permit holder shall maintain the discharges from this facility such that the average flow does not exceed the "Adjusted Design Flow" indicated on the front page of this permit. Average flow (gpd) shall be determined by the same method you used in calculating your adjusted design flow. Because you chose Method #1 to calculate your flow, your permit's average flow limit will be determined by multiplying the average water usage/day X 1.3.
An average flow in excess of the adjusted design flow is a permit violation.

D. SCHEDULE OF COMPLIANCE

The final daily maximum and monthly average Fecal Coliform limits of 1000mg/L and 400 mg/L and Total Residual Chlorine (TRC) limits of 0.019 mg/L and 0.010mg/L, respectively, shall become effective **April 1, 2009**

1. By **November 1, 2007**, submit plans and specifications(prepared by a registered professional engineer, licensed to practice in Missouri), application and appropriate fee for a construction permit to improve the existing treatment facility or eliminate the discharge.
2. By **April 1, 2009** this project must be completed according to the approved plans and specifications, and the final effluent limitations must be met.